

Applicants offer the following comments distinguishing the new claims from Aoshima.


Each of the new claims is limited by requiring that the focusing lens be tilted with respect to the optical axis of the pumping light. Aoshima neither teaches nor suggests this tilt.

As set forth in the present specification, this tilt permits the focusing points of the pumping light in the sagittal and tangential planes with corresponding points in the cavity mode, so that astigmatism-compensated pumping light is obtained. Aoshima never suggests that the oscillator 432 is tilted from the line of transmitted direction of the pumping light.

The specification has been augmented at page 10 to include a description of reference characters 2-6. As noted, these characters refer to respective planes whose representations are important in the calculation of the tilting angle.

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.


Respectfully submitted,


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**MARKED-UP VERSION OF REPLACED
PARAGRAPH(S) OF THE SPECIFICATION**

Page 10, first full paragraph, lines 8-19, the marked-up paragraph is as follows:

Fig. 5 shows only elements related to the pumping light in the configuration of the solid-state laser shown in Fig. 1. In Fig. 6, [from] of the elements shown in Fig. 5, only the pumping light source 11, the focusing lens 31, the concave lens 22, and the gain crystal 14 are shown, rearranged on a straight line for simplicity. The isolator 12, the $\lambda/2$ wave plate 13, and the plate 32 for beam axis adjustment which do not exert a substantial influence are omitted here. For each of the focusing lens 31 and the concave lens 22, Equations equivalent to the thin lens and space length shown in Figs. 3B and 4B are also given. In Fig. 6, characters 2 and 3 indicate the planes of the pumping light source 11 side and the gain crystal 14 side of the focusing lens 31, respectively. Characters 4 and 5 indicate the planes of the pumping light source 11 side and the gain crystal 14 side of the concave lens 22, respectively. Character 6 indicates the plane of the pumping light source 11 side of the gain crystal 14.

Page 11, first full paragraph, lines 2-16, the marked-up paragraph is as follows:

where, suffix 1 appearing in f_{1s} and t_{1s} corresponds to the focusing lens 31 and suffix 2 appearing in f_{2s} and t_{2s} corresponds to the concave lens 22. L_{ij} (L_{12} , L_{34} , L_{56} , L_{67}) shows an equivalent distance between a plane (i) and a plane (j) in Fig. 6. n_{YAG} denotes a refractive index of the gain crystal 14. When a Cr:YAG crystal is used, $n_{YAG} = 1.82$ (at the wavelength of 1064 nm). In the tangential plane, it is sufficient to replace the suffix s with t and to replace n_{YAG} with $(n_{YAG})^3$. The latter replacement is performed because the gain crystal 14 is polished so as to have the Brewster angle. This will be understood from the fact that when $R = \infty$ and $\tan\theta_1 = n_2(n_1 = 1)$ as a parameter of the Brewster angle are substituted for Equation 8, Equation 12 is obtained.